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Notice of Allowability	Application No.	Applicant(s)	
	09/987,385	HAYASHI ET AL.	
	Examiner	Art Unit	
	Mark Ruthkosky	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/8/2004.
2. ☒ The allowed claim(s) is/are 10,11,21 and 22.
3. ☒ The drawings filed on 14 November 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Mark Ruthkosky
 Primary Patent Examiner
 Art Unit 1745

Mark Ruthkosky 4/13/04

Art Unit: 1745

DETAILED ACTION

Rejections 35 U.S.C. 103

The rejection of claims 12, 16, 17, and 20 under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,168,879) in view of Saito et al. (US 5,586,993) is moot as the claims have been canceled.

The rejection of claims 13-15 and 18-19 under 35 U.S.C. 103(a) as being unpatentable over Kim (US 6,168,879), in view of JP 11167909 and further in view of Saito et al. (US 5,586,993) is moot as the claims have been canceled.

Allowable Subject Matter

Claims 10-11 and 21-22 are allowed.

The following is an examiner's statement of reasons for allowance:

The instant claims are to a lid for a secondary battery comprising a plate-shaped body formed with a hole therein; a terminal member, an insulating member, wherein the terminal member and insulating member are superposed in a peripheral edge of the hole with the insulating member arranged under the terminal member; a sealing member having a flange portion at one end and inserted into the hole; the sealing member consisting essentially of a flat plate having a hole to form the flange portion and consisting essentially of a cylindrical portion that is separate from the flange portion, and a rivet inserted in the sealing member and calked to join the terminal member and insulating member to the plate shaped body. The prior art does not teach a lid for a secondary battery comprising the elements, as claimed, wherein the sealing

member consisting essentially of a flat plate having a hole to form the flange portion and consisting essentially of a cylindrical portion that is separate from the flange portion.

The most pertinent art is JP 11167909, which teaches a lid for a secondary battery comprising a plate-shaped body formed with a hole; a rivet terminal member and an insulating member superposed in a peripheral edge of the hole with the insulating member arranged under the terminal member; a cylindrical sealing member having a flange portion at one end and inserted into the hole; and a rivet inserted in the sealing member. The sealing member comprises a flat plate having a hole to form the flange portion and a cylindrical portion that is separate from the flange portion (see figures 1-4.) The sealing member can be made from fluororesins. The reference does not teach a terminal member as defined or the members to be caulked to join the terminal member and insulating member to the plate shaped body.

In addition, Yoshizawa et al. (US 6,132,900) teaches a lid for a secondary battery comprising a plate-shaped body formed with a hole. A cylindrical sealing member having a flange portion at one end is inserted into the hole. A rivet is further inserted in the sealing member and calked to join the terminal member and insulating member to the plate shaped body (see figure 1; see claim 17 for the caulking sealant.) An electrode lead ribbon is connected to the rivet to conduct electrons from the electrode assembly. The reference does not teach a sealing member that comprises a flat plate having a hole to form the flange portion and a cylindrical portion that is separate from the flange portion. The sealing member is one piece.

Further, Kim (US 6,168,879) teaches a lid for a secondary battery comprising a plate-shaped body having a hole formed therein; a sealing member, which is also an insulating member, having a flange portion at one end and inserted into the hole; a rivet comprising a shank

Art Unit: 1745

and a head, said shank having a first end inserted in the sealing member and a second end opposite the first end wherein the head is provided on the second end of the shank and a lead wire directly connected to the first end of the shank. The reference does not teach the sealing member to comprise a flange portion and a cylindrical portion that is separate from the flange portion or that the cylindrical portion is made of a fluororesin.

As the prior art does not teach a lid for a secondary battery comprising the elements, as claimed, wherein the sealing member consisting essentially of a flat plate having a hole to form the flange portion and consisting essentially of a cylindrical portion that is separate from the flange portion, the claims are allowed. The application notes that having separate pieces will allow for the use of two separate sealing materials that will provide a better seal or the use of cheaper materials to lower costs. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Examiner Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Ruthkosky whose telephone number is 571-272-1291. The examiner can normally be reached on FLEX schedule (generally, Monday-Thursday from 9:00-6:30.) If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached at 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1745

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark Ruthkosky

Primary Patent Examiner

Art Unit 1745

Mark Ruthkosky
4/13/04